

Vanco Explorations Limited

Preliminary Proposal

Surface Mining of 19B Vein

SADIM PROPERTY

**Aspen Grove Area, B.C.
Similkameen M.D.
92H/10E**

**Prepared by
I.M. Watson**

May 1994

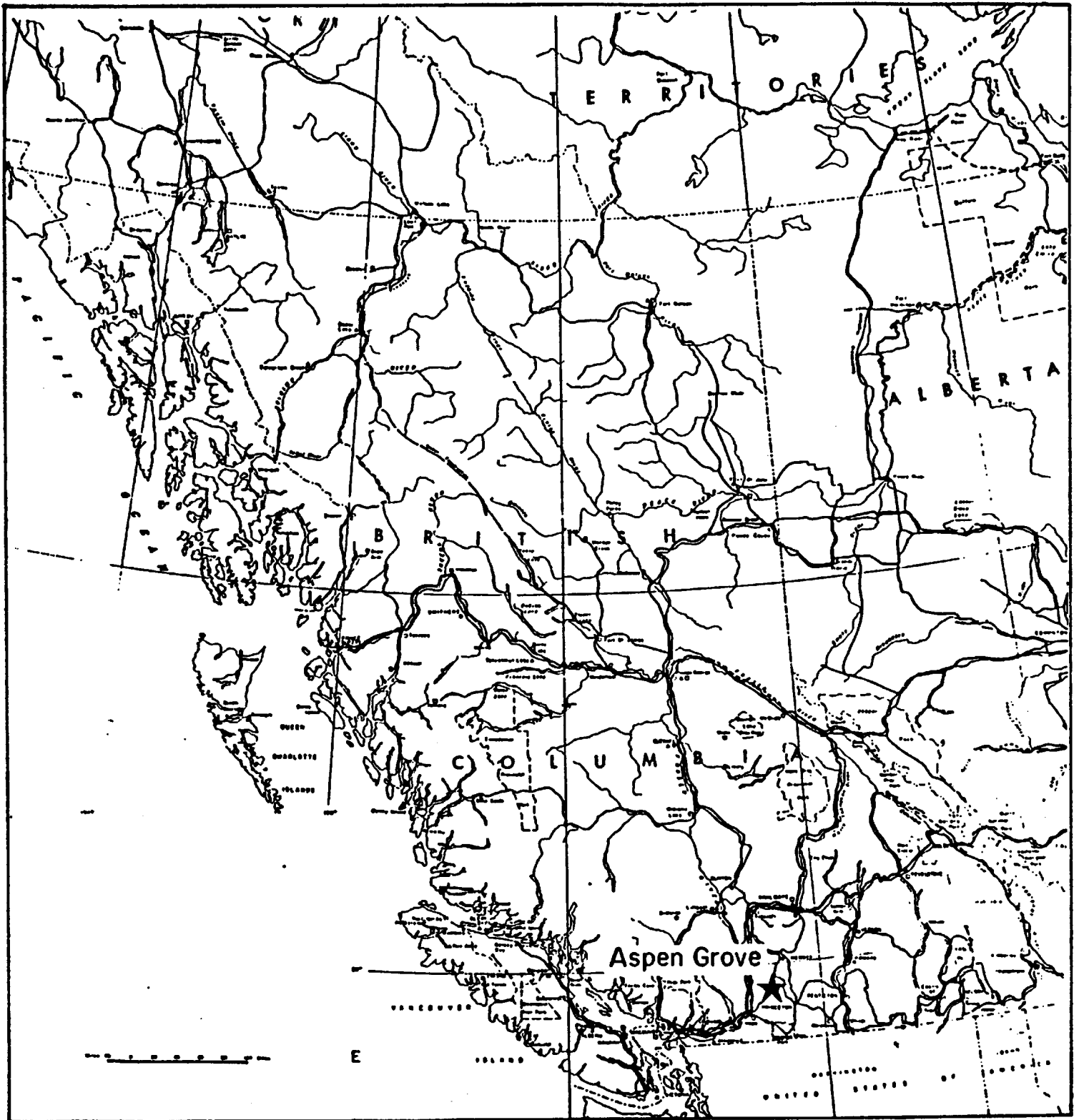
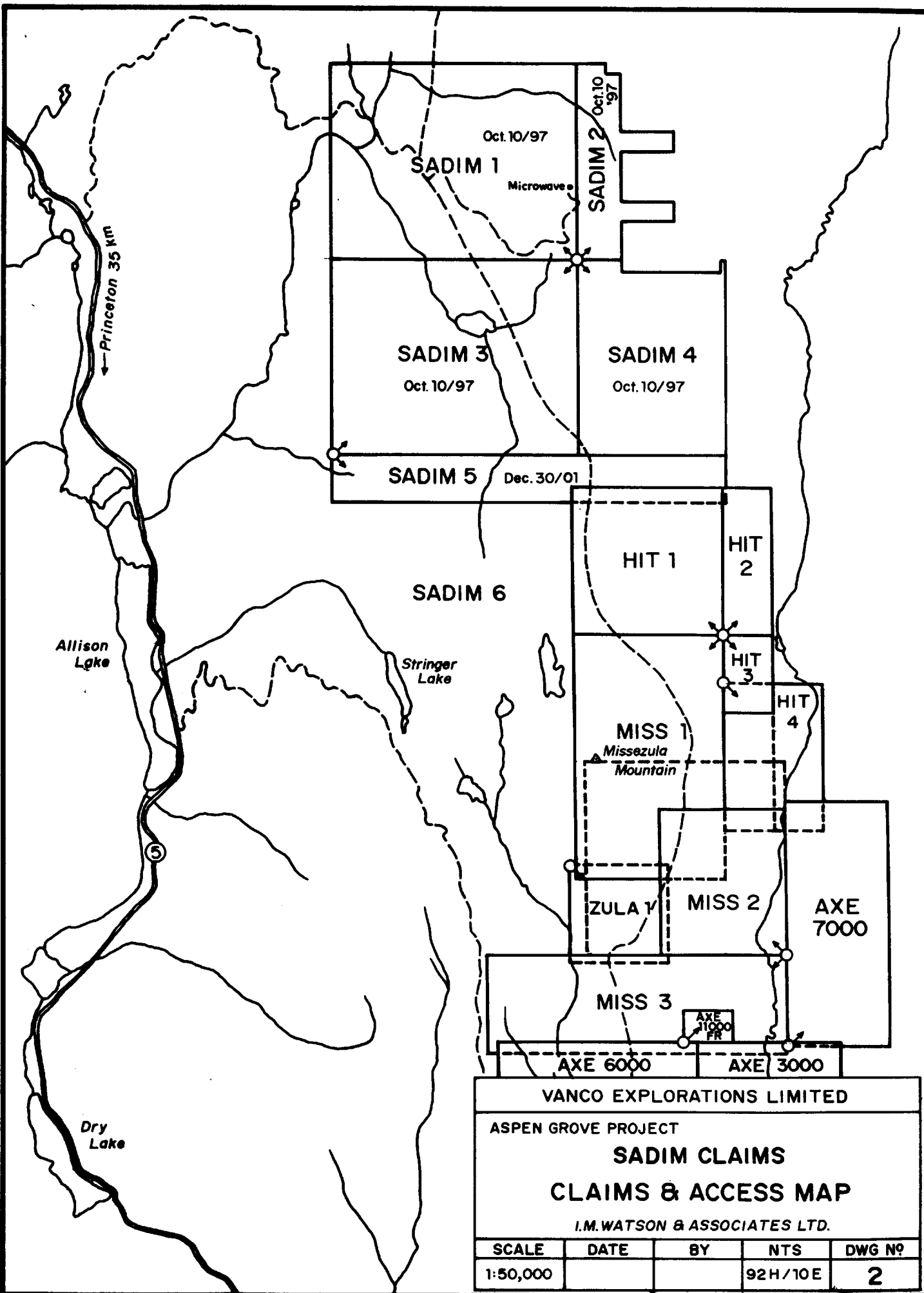


Fig. 1

VANCO EXPLORATIONS LTD.
ASPEN GROVE PROPERTY

INDEX MAP .



VANCO EXPLORATIONS LIMITED				
ASPEN GROVE PROJECT				
SADIM CLAIMS				
CLAIMS & ACCESS MAP				
I.M. WATSON & ASSOCIATES LTD.				
SCALE	DATE	BY	NTS	DWG N ^o
1:50,000			92H/10E	2

CLAIMS, LOCATION AND ACCESS

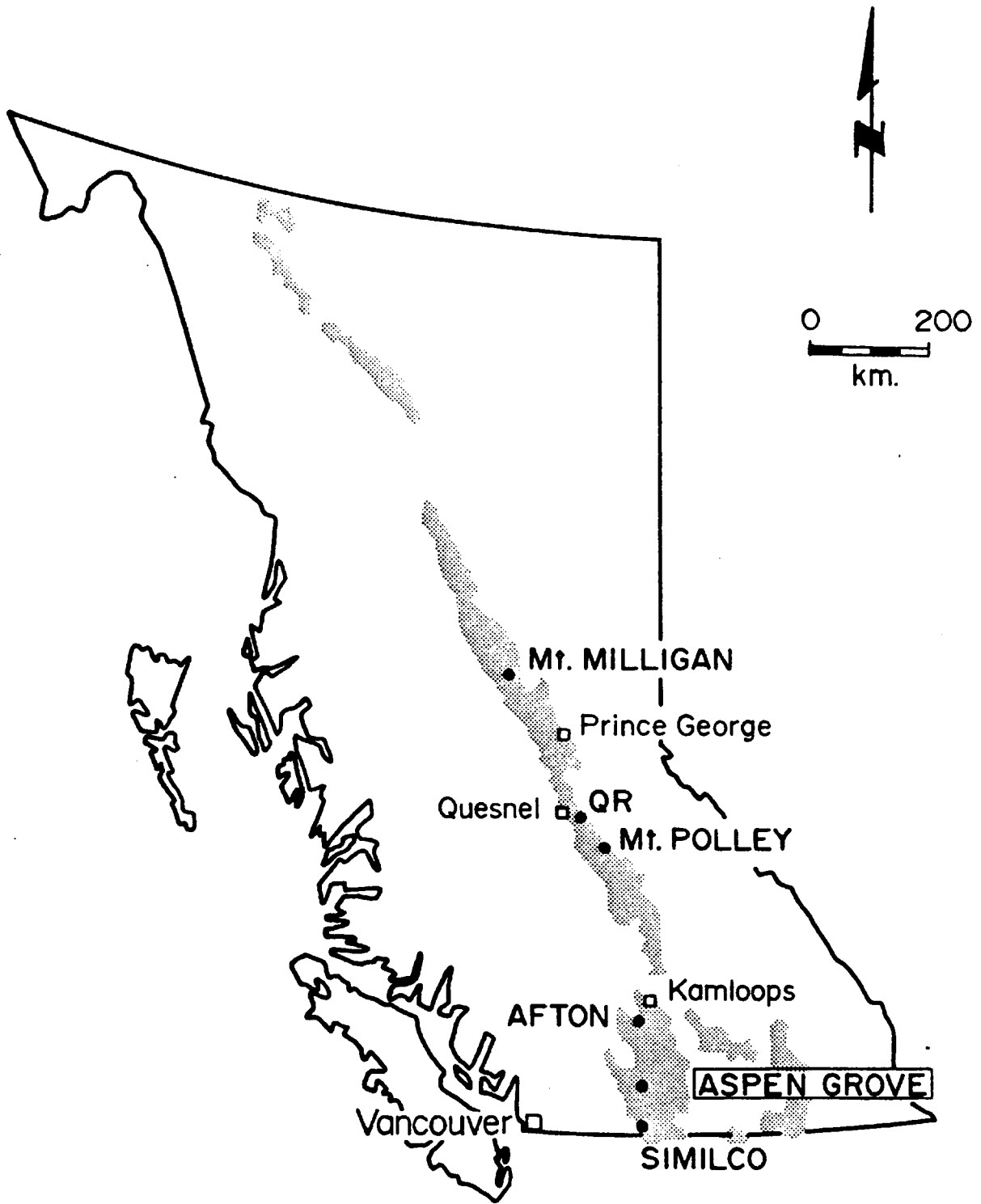
The SADIM 1-5 claims are situated in the Missezula Mountain area of southwestern B.C., 30 kilometres north of Princeton and 30 kilometres south of Aspen Grove and the Okanagan Connector Highway. There is easy access to and throughout the property by main and branch logging roads.

The SADIM 1-5 claims, comprising 68 units, are listed as follows:

<u>Claim Name</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
SADIM 1	20	2284	October 10, 1997
SADIM 2	8	2285	October 10, 1997
SADIM 3	20	2286	October 10, 1997
SADIM 4	12	2287	October 10, 1997
SADIM 5	8	2518	December 30, 2001

GEOLOGICAL SETTING

The claims are underlain by Triassic Age Nicola Group volcanic, sedimentary and intrusive rocks which form the southerly extension of the Quesnel Belt. The Nicola and Quesnel Belts host numerous porphyry gold-copper deposits, including the Afton and Similco mines at Kamloops and Princeton. The Axe deposit, which contains 57.5×10^6 tons of 0.5% Cu, is three and a half kilometres to the south of the SADIM claims. The Fairfield Minerals Siwash North gold deposit, 22 kilometres to the northeast, contains an estimated reserve of 135,000 tons averaging 1.6 opt Au.



 *Mesozoic Quesnellia Terrane*

 *Cu - Au deposits*

VANCO EXPLORATIONS LTD.
 SADIM PROPERTY

Au - Cu DEPOSITS
 in the
QUESNELLIA TERRANE, B.C.

Dec. 3, 1991

Fig. 3

SUMMARY OF WORK DONE

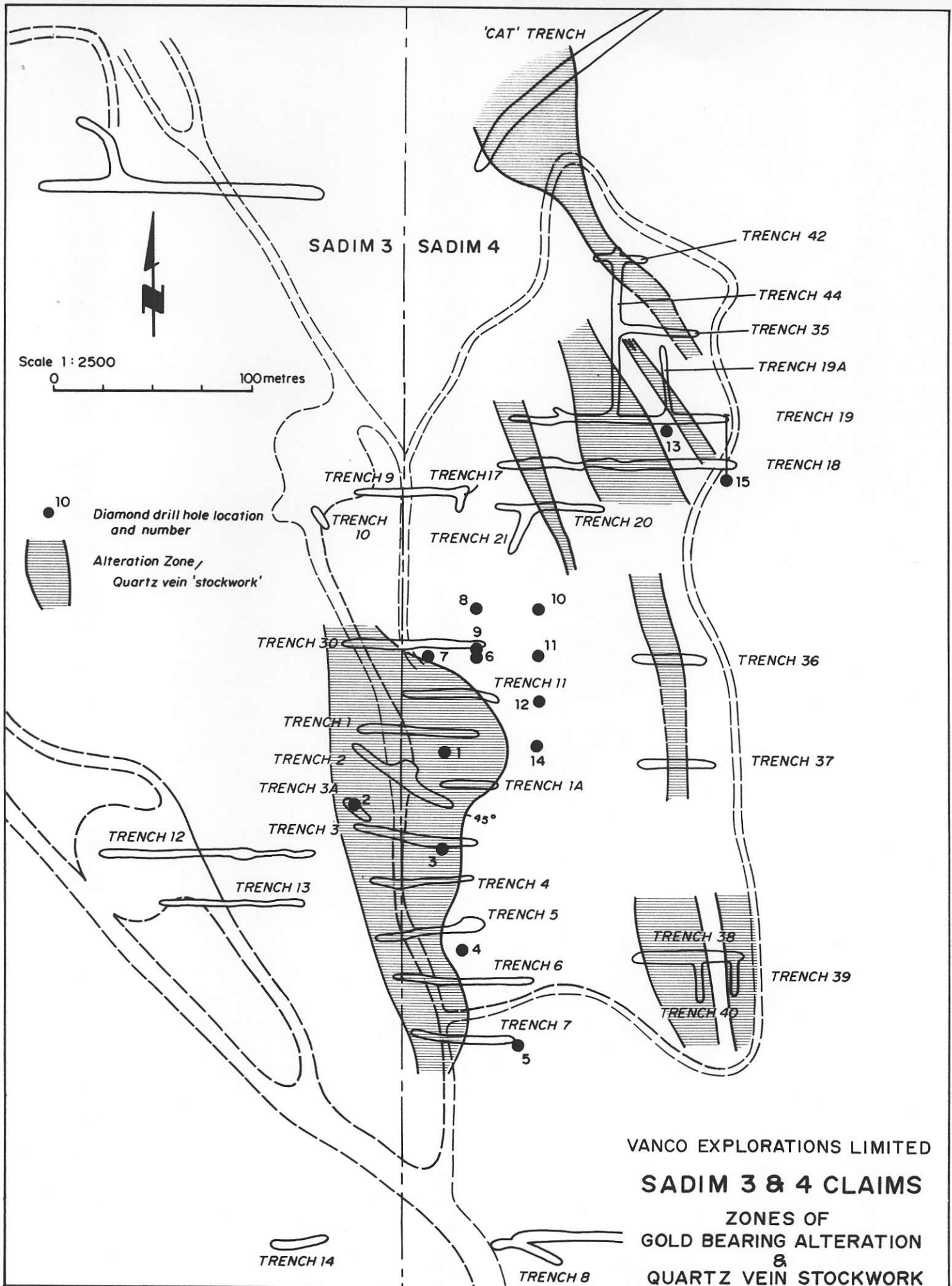
The SADIM claims were staked in October 1984 by I.M. Watson and, following the discovery of gold-silver bearing quartz veins, were optioned to Laramide Resources in November 1985. Ownership was subsequently transferred to Vanco Explorations Ltd., a subsidiary of Laramide Resources. Between 1985 and 1987 the claims were explored by geological mapping, geochemical soil/rock sampling, excavator trenching, VLF-EM and magnetometer surveys, and by a total of 15 diamond drill holes totalling 1,235 metres. Further trenching and sampling of the Main Zone was carried out in 1991.

Total expenditures during the period 1984 to 1987 were \$275,784.

ALTERATION/QUARTZ STOCKWORK ZONES

Exploration has revealed shear related quartz vein stockworks in a northerly striking, easterly dipping sequence of carbonatised and pyritised andesitic tuffs. The **Main Zone** occurs above a major north striking, east dipping shear zone. The tuffs in the hanging wall of the shear have been intensely fractured, leading to the development of the quartz vein stockwork. Veins strike easterly, approximately normal to the major shear, and dip moderately to steeply south; they range in size from hair width to greater than one metre. The stockwork zone has been delineated by trenching and drilling over an area 200 metres by 60 metres, and is open to the east and south at depth.

A few tens of metres east of the Main Zone there are a series of parallel shear-related alteration zones (**East Zone**). Generally the shearing and alteration is less intense than in the Main Zone and the quartz vein stockwork is not as strongly developed. However, several larger quartz veins have been exposed by trenching; in trench 19B a well mineralised metre wide quartz vein strikes easterly and dips 70° South.



MINERALISATION

The quartz stockwork veins contain erratically and generally weakly disseminated sulphides, mainly pyrite, with minor chalcopyrite, sphalerite and, less commonly, galena. Sulphide and gold-silver concentration is related to vein size and density of fracturing. The presence of galena is a good indication of elevated gold and silver content. Native gold has not been identified but thin sections reveal the presence of lead and silver tellurides (altaite and hessite) and it is possible that gold may be present as a telluride.

The nature and setting of the alteration and mineralised veins suggest a mesothermal type deposit emplaced via major shears and related fracture zones, and originating from an acid intrusion at depth.

Trenching and drilling of the Main Zone shows a distribution of significant gold/silver contents throughout the 200-metre x 60-metre area of alteration with best values occurring in the northern part of the zone. Trench sampling assays range from 50 ppb Au to 4,350 ppb Au, and a 1.1-metre vein in Trench #2 assayed 0.19 opt Au (6,390 ppb). All drill holes in the Main Zone intersected zones of gold enrichment ranging from a few hundred ppb to 3,090 ppb over 9.0 metres in hole #6, including a one-metre section assaying 19,200 ppb Au (0.58 opt) and 159.1 ppm Ag (4.6 opt).

Although the **East Zone** alteration is more confined and the quartz stockwork not as strongly developed, it contains the most strongly mineralised quartz vein encountered so far. The vein is exposed in Trench #19B for a strike length of 25 metres, ranges from 0.3 to 1.0 metres in width, strikes east, and dips steeply south. To the east the vein weakens as it passes from the altered tuff into the overlying easterly dipping calcareous tuffs and limestone; to the west it feathers and pinches out in a strong northerly striking shear zone. Between the limestone and the shear the vein is moderately mineralised with pyrite, chalcopyrite, and galena. Mineralisation is strongest at the wider eastern end of the section immediately below the limy tuffs. A series of nine chip samples taken at two-metre intervals across the vein returned assays ranging from

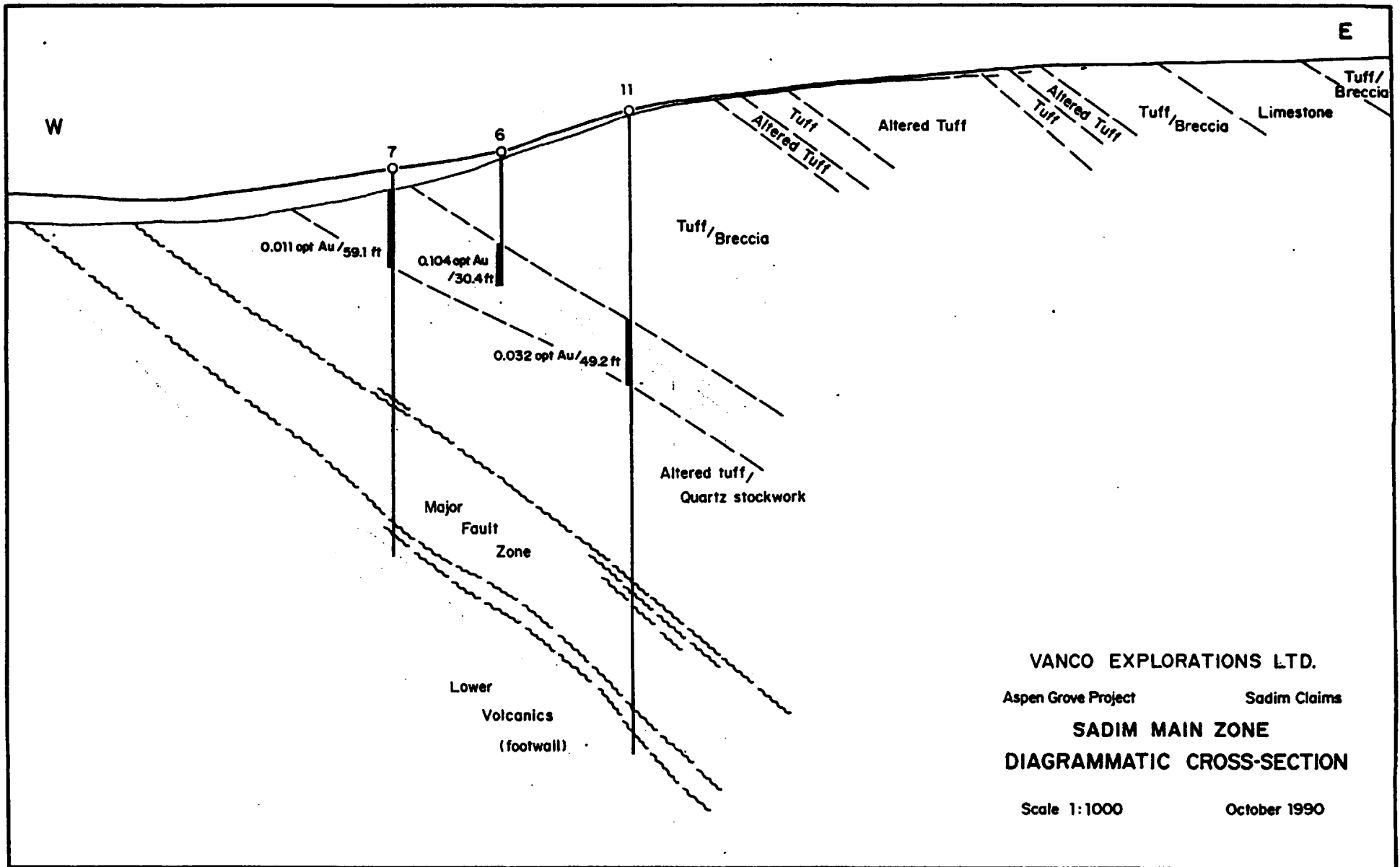
34.35 g/Tonne to 149.71 g/Tonne Au (1.05 to 4.38 opt Au) over widths from 0.3 to 1.0 metres. The average grade and width over a length of 15.51 metres (50.9') is 83.4 g/Tonne over 0.57 metres (2.44 opt Au/1.9').

A vertical hole (#13), collared ten metres south of the highest grade surface sample, intersected a vein at a depth of 26.5 metres (86.9') which assayed 2,265 ppb Au and 20.6 ppm Ag over a drilled width of 2.0 metres. A recent re-examination of the 19B trench exposed the vein more fully, revealing distortion which results in a steeper dip than suspected; it is possible that Hole #13 may not have intersected the 19B vein.

Hole #15, inclined to intersect the vein 30 metres along strike to the east, failed to encounter any significant mineralisation.

The #19B trench vein mineralisation is strongest immediately west and below the contact between the altered tuffs and the overlying calcareous tuffs/limestone. This apparent enhancement of gold/sulphide content at the contact with limy rocks was also noted in trenches on the Main Zone, although grades were not as high as in the 19 trench vein.

The Main Zone stockwork is open to the east (down-dip) and to the south; further, deeper drilling is needed to establish the southern and eastern limits of the mineralised veins below the calcareous tuffs.



A. ESTIMATED COSTS (Asarco Smelter, Helena, Montana)

SCENARIO I - Max. Mining Costs

Sadim: Ore 235 tons; Waste 1,860 tons

I.	Permitting/Legal/Organisation				\$3,500
II.	Site Preparation/Preliminary Sampling (1.5 days)				
	Excavator+	15 hrs.	@ \$145.00/hr.	\$2,175.00	
	Geologist	1.5 days	@ \$425.00/day	637.50	
	Helper	1.5 days	@ \$200.00/day	300.00	
	Truck	1.5 days	@ \$55.00/day	82.50	
	Fuel	1.5 days	@ \$20.00/day	30.00	
	Room/board (2 @ \$40/day)		@ \$80.00/day	<u>120.00</u>	3,345
III.	Mining/Sampling (10 days)				
	Excavator	100 hrs.	@ \$145.00/hr.	\$14,500.00	
	Airtrak Rental say 20 hrs.		@ \$175.00/hr.	3,500.00	
	Dump Truck	10 days	@ \$100.00/day*	*1,000.00	
	Geologist	10 days	@ \$425.00/day	4,250.00	
	Helper	10 days	@ \$200.00/day	2,000.00	
	Truck/P.U.	10 days	@ \$55.00/day	550.00	
	Fuel	10 days	@ \$20.00/day	200.00	
	Supplies & powder, say			500.00	
	Room/board	10 days	@ \$80.00/day	800.00	
	Sampling - 400 @ \$28.95 ea		Au/Ag (Metallics)	11,576.00	
	Lowbed rental	18 hrs.	@ \$80.00/hr.	<u>960.00</u>	39,336
IV.	Crushing (B.A. Blacktop, Kamloops)				
	say 3 hrs. @ \$225.00/hr.			\$675.00	
	Supervision	1 day	@ \$425.00/day	<u>425.00</u>	1,100
V.	Trucking, Sadim - Kamloops 148 kms.; Kamloops - Ashcroft 66 kms.				
	235 tons		@ \$16.00/ton*	* \$3,766.00	
	Supervision	1 day	@ \$425.00/day	<u>425.00</u>	4,185
VI.	Rail transportation - Ashcroft to E. Helena, Montana via CPR				
	235 tons		@ \$32.63 U.S./ton		
	@ \$0.725 Cdn.= \$1.00 U.S.		@ \$45.00 Cdn./ton	\$10,575.00	
	Supervision	1 day	@ \$425.00/day	<u>425.00</u>	11,000
VII.	Smelter Charges (Asarco, Helena, Montana)				
	Crushing charges:				
	235 tons		@ \$10.00 U.S./ton		
			@ \$13.80 Cdn./ton	3,243.00	

*Costs to be confirmed

+Basic rate \$125.00, with hydraulic bit \$145.00

VII. Smelter Charges (cont'd.)

Base charge:			
235 tons	@ \$90.00 U.S./ton		
	@ \$124.00 Cdn./ton	29,140.00	
Deductions, say 701 ozs	@ \$6.00 U.S./oz		
	@ \$8.28 Cdn./oz	<u>4,471.00</u>	36,854

VIII. Reclamation

Cat rental	16 hrs.	@ \$120.00/hr.	\$ 1,920.00	
Lowbed	6 hrs.	@ \$80.00/hr.	480.00	
Supervision	2 days	@ \$200.00/day	400.00	
Reseeding/planting, 2 days		@ \$200.00/day	400.00	
Reseeding/planting materials			<u>500.00</u>	<u>3,700</u>
	Subtotal			103,020
	Contingency @ 20%			<u>20,604</u>
	TOTAL			\$ <u>123,624</u>

A. ESTIMATED COSTS (Asarco Smelter, Helena, Montana) - cont'd.

SCENARIO II - Min. Mining Costs**

Sadim: Ore 235 tons; Waste 1,860 tons

I.	Permitting/Legal/Organisation				\$3,500
II.	Site Preparation/Preliminary Sampling (1.5 days)				
	Excavator+	15 hrs.	@ \$145.00/hr.	\$2,175.00	
	Geologist	1.5 days	@ \$425.00/day	637.50	
	Helper	1.5 days	@ \$200.00/day	300.00	
	Truck	1.5 days	@ \$55.00/day	82.50	
	Fuel	1.5 days	@ \$20.00/day	30.00	
	Room/board (2 @ \$40/day)		@ \$80.00/day	<u>120.00</u>	3,345
III.	Mining/Sampling (5 days)				
	Excavator	50 hrs.	@ \$125.00/hr.	\$6,250.00	
	Dump Truck	5 days	@ \$100.00/day	*500.00	
	Geologist	5 days	@ \$425.00/day	2,125.00	
	Helper	5 days	@ \$200.00/day	1,000.00	
	Truck/P.U.	5 days	@ \$55.00/day	275.00	
	Fuel	5 days	@ \$20.00/day	100.00	
	Supplies & powder, say			350.00	
	Room/board	5 days	@ \$80.00/day	400.00	
	Sampling - 400 @ \$22.75 ea			9,100.00	
	Lowbed rental	9 hrs.	@ \$80.00/hr.	<u>720.00</u>	20,820
IV.	Crushing (B.A. Blacktop, Kamloops)				
	say 3 hrs. @ \$225.00/hr.			\$675.00	
	Supervision	1 day	@ \$425.00/day	<u>425.00</u>	1,100
V.	Trucking, Sadim - Kamloops 148 kms.; Kamloops - Ashcroft 66 kms.				
	235 tons		@ \$16.00/ton*	* \$3,760.00	
	Supervision	1 day	@ \$425.00/day	<u>425.00</u>	4,185
VI.	Rail transportation - Ashcroft to E. Helena, Montana via CPR				
	235 tons		@ \$32.63 U.S./ton		
	@ \$0.725 Cdn.=\$1.00 U.S.		@ \$45.00 Cdn./ton	\$10,575.00	
	Supervision	1 day	@ \$425.00/day	<u>425.00</u>	11,000
VII.	Smelter Charges (Asarco, Helena, Montana)				
	Crushing charges:				
	235 tons		@ \$10.00 U.S./ton		
			@ \$13.80 Cdn./ton	3,243.00	

*Costs to be confirmed

**Possible cost cutting in "III. Mining/Sampling" - Cut time to 5 days; omit AirTrak; omit hydraulic bit on excavator; sampling @ \$22.75/sample (no metallics?)

VII. Smelter Charges (cont'd.)

Base charge:			
235 tons	@ \$90.00 U.S./ton		
	@ \$124.00 Cdn./ton	29,140.00	
Deductions, say 540 ozs	@ \$6.00 U.S./oz		
	@ \$8.28 Cdn./oz	<u>4,471.00</u>	36,854

VIII. Reclamation

Cat rental	16 hrs.	@ \$120.00/hr.	\$ 1,920.00	
Lowbed	6 hrs.	@ \$80.00/hr.	480.00	
Supervision	2 days	@ \$200.00/day	400.00	
Reseeding/planting, 2 days		@ \$200.00/day	400.00	
Reseeding/planting materials			<u>500.00</u>	<u>3,700</u>
	Subtotal			84,504
	Contingency @ 20%			<u>16,901</u>
	TOTAL			\$ <u>101,405</u>

**VALUE BASED ON ORE CONTENT
OF 235 TONS (573 ozs Au)
- Asarco Smelter -**

Value of Au per oz	Total Value of Gold 540 ozs (after smelter deductions)	Costs		Revenue
\$400 Cdn.	\$216,000	I.	123,624	I. 92,376
		II.	101,405	II. 114,595
\$500 Cdn.	\$270,000	I.	123,624	I. 146,376
		II.	101,405	II. 168,595
\$530 Cdn.	\$286,200	I.	123,624	I. 162,576
		II.	101,405	II. 184,795

Notes: I. Cost (max.) based on 10-day mining period.
II. Cost (min.) based on 5-day mining period.

Au price March 31, 1994	U.S. \$387.15
Can. dollar March 31, 1994	U.S. \$0.7251
Au price	Can. \$533.92
Estimated maximum Au content	2.44 opt

Fairfield costs 1993

U.S. \$170/oz = Cdn. \$234.00/oz

Cost for 573 ozs = Cdn. \$134,082

Cost for 540 ozs = Cdn. \$126,360

B. ESTIMATED COSTS (Premier Mill, Stewart, B.C.)

SCENARIO I - Max. Mining Costs

Sadim: Ore 235 tons; Waste 1,860 tons

I.	Permitting/Legal/Organisation				\$3,500
II.	Site Preparation/Preliminary Sampling (1.5 days)				
	Excavator+	15 hrs.	@ \$145.00/hr.	\$2,175.00	
	Geologist	1.5 days	@ \$425.00/day	637.50	
	Helper	1.5 days	@ \$200.00/day	300.00	
	Truck	1.5 days	@ \$55.00/day	82.50	
	Fuel	1.5 days	@ \$20.00/day	30.00	
	Room/board (2 @ \$40/day)		@ \$80.00/day	<u>120.00</u>	3,345
III.	Mining/Sampling (10 days)				
	Excavator	100 hrs.	@ \$145.00/hr.	\$14,500.00	
	Airtrak Rental say 20 hrs.		@ \$175.00/hr.	3,500.00	
	Dump Truck	10 days	@ \$100.00/day*	*1,000.00	
	Geologist	10 days	@ \$425.00/day	4,250.00	
	Helper	10 days	@ \$200.00/day	2,000.00	
	Truck/P.U.	10 days	@ \$55.00/day	550.00	
	Fuel	10 days	@ \$20.00/day	200.00	
	Supplies & powder, say			500.00	
	Room/board	10 days	@ \$80.00/day	800.00	
	Sampling - 400 @ \$28.95 ea Au/Ag (Metallics)			11,576.00	
	Lowbed rental	18 hrs.	@ \$80.00/hr.	<u>960.00</u>	39,336
IV.	Trucking - Sadim to Premier Mill, Stewart, B.C. (783 miles; 1,259 kms)				
	783 miles @ 15¢/ton mile				
	i.e. 235 tons x 783 miles x 15¢/ton mile				27,601
V.	Milling				
	Treatment charge - 235 tons @ \$50.00/ton				11,750
VI.	Reclamation				
	Cat rental	16 hrs.	@ \$120.00/hr.	\$ 1,920.00	
	Lowbed	6 hrs.	@ \$80.00/hr.	480.00	
	Supervision	2 days	@ \$200.00/day	400.00	
	Reseeding/planting, 2 days		@ \$200.00/day	400.00	
	Reseeding/planting materials			<u>500.00</u>	<u>3,700</u>
	Subtotal				89,232
	Contingency @ 20%				<u>17,846</u>
	TOTAL				\$ <u>107,078</u>

*Costs to be confirmed

+Basic rate \$125.00, with hydraulic bit \$145.00

B. ESTIMATED COSTS (Premier Mill, Stewart, B.C.) - cont'd.

SCENARIO II - Min. Mining Costs**

Sadim: Ore 235 tons; Waste 1,860 tons

I.	Permitting/Legal/Organisation				\$3,500
II.	Site Preparation/Preliminary Sampling (1.5 days)				
	Excavator+	15 hrs.	@ \$145.00/hr.	\$2,175.00	
	Geologist	1.5 days	@ \$425.00/day	637.50	
	Helper	1.5 days	@ \$200.00/day	300.00	
	Truck	1.5 days	@ \$55.00/day	82.50	
	Fuel	1.5 days	@ \$20.00/day	30.00	
	Room/board (2 @ \$40/day)		@ \$80.00/day	<u>120.00</u>	3,345
III.	Mining/Sampling (5 days)				
	Excavator	50 hrs.	@ \$125.00/hr.	\$6,250.00	
	Dump Truck	5 days	@ \$100.00/day	*500.00	
	Geologist	5 days	@ \$425.00/day	2,125.00	
	Helper	5 days	@ \$200.00/day	1,000.00	
	Truck/P.U.	5 days	@ \$55.00/day	275.00	
	Fuel	5 days	@ \$20.00/day	100.00	
	Supplies & powder, say			350.00	
	Room/board	5 days	@ \$80.00/day	400.00	
	Sampling - 400 @ \$22.75 ea			9,100.00	
	Lowbed rental	9 hrs.	@ \$80.00/hr.	<u>720.00</u>	20,820
IV.	Trucking - Sadim to Premier Mill, Stewart, B.C. (783 miles; 1,259 kms)				
	783 miles @ 15¢/ton mile				
	i.e. 235 tons x 783 miles x 15¢/ton mile				27,601
V.	Milling				
	Treatment charge - 235 tons @ \$50.00/ton				11,750
VI.	Reclamation				
	Cat rental	16 hrs.	@ \$120.00/hr.	\$ 1,920.00	
	Lowbed	6 hrs.	@ \$80.00/hr.	480.00	
	Supervision	2 days	@ \$200.00/day	400.00	
	Reseeding/planting, 2 days		@ \$200.00/day	400.00	
	Reseeding/planting materials			<u>500.00</u>	<u>3,700</u>
	Subtotal				70,716
	Contingency @ 20%				<u>14,143</u>
	TOTAL				\$ <u>84,859</u>

*Costs to be confirmed

**Possible cost cutting in "III. Mining/Sampling" - Cut time to 5 days; omit AirTrak; omit hydraulic bit on excavator; sampling @ \$22.75/sample (no metallics?)

VALUE BASED ON ORE CONTENT OF 235 TONS (573 ozs Au) - Premier Mill -			
Value of Au per oz	Total Value of Gold 480 ozs * (after deductions)	Costs	Revenue
\$400 Cdn.	\$192,000	I. 107,075	I. 84,922
		II. 84,859	II. 107,141
\$500 Cdn.	\$240,000	I. 107,075	I. 132,922
		II. 84,859	II. 155,141
\$530 Cdn.	\$254,400	I. 107,075	I. 147,322
		II. 84,859	II. 169,541

Notes: I. Cost (max.) based on 10-day mining period.
II. Cost (min.) based on 5-day mining period.

Au price March 31, 1994	U.S. \$387.15
Can. dollar March 31, 1994	U.S. \$0.7251
Au price	Can. \$533.92
Estimated maximum Au content	2.44 opt

Fairfield costs 1993

U.S. \$170/oz = Cdn. \$234.00/oz

Cost for 573 ozs = Cdn. \$134,082

Cost for 480 ozs = Cdn. \$112,320

*Assume recovery 90% (of 573 ozs)

say 516 ozs

Holdback (7% of 516 ozs)

say 36 ozs

Recovery minus holdback

480 ozs

SMELTER CHARGES
Asarco - Helena, Montana

(See Quote Attached)

Assume 235 tons @ 2.44 opt Au = 573 ozs Au

Crushing Charge	235 tons	@	U.S. \$10.00/ton	
		@	Cdn. \$13.80/ton	Cdn. \$ 3,243

Base Charge	235 tons	@	U.S. \$90.00/ton	
		@	Cdn. \$124.00/ton	29,140

Less smelter deduction .02 ozs/ton
i.e. 235 x .02 4.7 ozs (say 5 ozs)

∴ Smelter pays for 95% of 568, say 540 ozs

Less refining charge		@	U.S. \$6.00/oz	
		@	Cdn. \$8.28/oz	
i.e. 540 x \$8.28				<u>4,471</u>

TOTAL SMELTER CHARGES	Cdn. \$ <u>36,854</u>
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